Title: APPARATUS FOR TRANSMITTING AND RECEIVING EXECUTABLE APPLICATIONS AS FOR A MULTIMEDIA SYSTEM, AND SYSTEM TO ORDER AN ITEM USING A DISTRIBUTED COMPUTING SYSTEM

## IN THE CLAIMS

Claims 1.-67. (Cancelled)

68. A method comprising:
using a server to transmit to a client both a television program and a computing
application comprising executable code, the executable code to be executed at the client to cause
display of interactive information associated with the television program while the television
program is being displayed at the client, describe an item to a television viewer;
detecting, at the server, a signal representing a viewer interaction with the interactive
information, the viewer interaction indicating a selection of the item; and

69. The method of claim 68, wherein the viewer interaction causes display of instructions to solicit information necessary to place the order.

in response to the viewer interaction, causing an order for the item to be placed.

- 70. The method of claim 69, wherein the information is solicited using one or more of an onscreen display and voice instructions.
- The method of claim 68, wherein the viewer interaction is by way of a single command.
- 72. The method of claim 71, wherein the single command is pressing of a single button on a TV remote control.
- 73. The method of claim 68, wherein causing the order to be placed is achieved by using: information related to the item and viewer related personal information.

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- 74. The method of claim 73, wherein the personal information includes at least one of the group consisting of the viewer's name, address, method of payment and payment account number.
- 75. The method of claim 74, wherein the personal information is stored in memory at the client.
- 76. The method of claim 74, wherein the system further includes a local computer and associated storage and wherein the method further comprises:
- using the client to retrieve information from one or more of the local computer and the associated storage.
- 77. The method of claim 76, wherein the method further comprises: controlling the client by means of the local computer.
- 78. The method of claim 76, wherein the local computer is part of a local area network.
- 79. The method of claim 68, wherein the system further includes a central processing facility in communication with the server and wherein the method comprises;
- sending information used in processing the order from the client to the central processing facility.
- 80. The method of claim 79, further comprising:
- communicating information between the client and the server via the central processing facility.
- 81. The method of claim 79, wherein a telephone system acts as the central processing facility.
- 82. The method of claim 68, further comprising:

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sending an order confirmation to the television viewer to confirm the order. 83. The method of claim 68, wherein the server provides data in a series of multiplexed packets, ones of which contain data representing the video, and others of which represent the executable code. 84. The method of claim 83, wherein the executable code is repetitively transmitted during times that the video is transmitted. 85. The method of claim 83, wherein the client includes a client computer and an auxiliary processor, the method comprising: using the auxiliary data processor to process data representing the video, and using the client computer to execute the executable code. 86. The method of claim 85, wherein the client computer and the auxiliary data processor are contained in a set top box. 87. A method of facilitating ordering an item using an interactive television system, the method comprising: receiving, at a client both television programming and a computing application comprising executable code; executing the executable code to display interactive information associated with the television program contemporaneously with the television program, the interactive information associated with the television program to show or describe an item to the television viewer; detecting a signal representing a viewer interaction associated with the interactive information, the viewer interaction indicating a selection of the item; and

in response to the viewer interaction, deriving order information from the viewer

interaction and sending the order information to the server.

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- 88. The method of claim 87, wherein the viewer interaction causes display of instructions to solicit information necessary to place an order for the item.
- The method of claim 88, wherein the information is solicited using one or more of an onscreen display and voice instructions.
- 90. The method of claim 87, wherein the viewer interaction is by way of a single command.
- The method of claim 90, wherein the single command is pressing of a single button on a TV remote control.
- The method of claim 87, wherein causing the order to be placed is achieved by using: information related to the item and user related personal information.
- The method of claim 92, wherein the personal information includes at least one of the group consisting of the user's name, address, method of payment and payment account number.
- 94. The method of claim 93, wherein the personal information is stored in local memory.
- 95. The method of claim 87, further comprising:
- communicating information via a central processing facility.
- The method of claim 95, wherein a telephone system acts as the central processing facility.
- 97. The method of claim 87, further comprising receiving an order confirmation to the user to confirm the order.

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- 98. The method of claim 87, wherein the distributed computing application comprises a series of multiplexed packets, ones of which contain data representing the video, and others of which represent the executable code.
- 99. The method of claim 87, wherein a client includes a client computer and an auxiliary processor, the method comprising:
- using the auxiliary data processor to process data representing the video, and using the client computer to execute the computing application.
- 100. The method of claim 99, wherein the client computer and the auxiliary data processor are contained in a set top box.

## 101. A method comprising:

- providing to the client both television programming and a computing application comprising executable code, the executable code to be executed at the client to cause display of interactive information associated with the television program while the television program is being displayed at the client, the interactive information associated with the television program to show or describe an item to the television viewer;
- detecting, at the server, a viewer interaction associated with the interactive information, the viewer interaction indicating a selection of the item; and
  - in response to the viewer interaction, receiving an order for the item.
- 102. The method of claim 101, wherein the received order includes:
- information related to the item and user related personal information.
- 103. The method of claim 102, wherein the personal information includes at least one of the group consisting of the user's name, address, method of payment and payment account number,

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104. The method of claim 101, including providing the data in a series of multiplexed packets, ones of which contain data representing the video, and others of which represent the executable code.

105. The method of claim 101, wherein the executable code is repetitively transmitted during times that the video is transmitted.

## 106. An interactive television system comprising:

a server configured to transmit to a client in communication with the server, both television

programming and a computing application comprising executable code, the executable
code to be executed at the client to cause display of interactive information associated
with the television program while the television program is being displayed at the client;
the client configured to:

## access the computing application;

execute the executable code to cause display of interactive information associated with the television program, while the video associated with the television program is being displayed;

use one or more of the displayed video and the interactive information to show or describe an item to the television viewer:

detect a signal representing a user interaction with the interactive information, the user interaction indicating a selection of the item by the television viewer; and

in response to the interaction, derive order information from the viewer interaction and send the order information to the server.

- 107. The system of claim 106, wherein the user interaction causes display of instructions to solicit information necessary to cause an order for the item to be placed.
- 108. The system of claim 107, wherein the information is solicited using one or more of an onscreen display and voice instructions.

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- 109. The system of claim 106, wherein the interaction is by way of a single command.
- 110. The system of claim 109, wherein the single command is pressing of a single button on a TV remote control.
- 111. The system of claim 106, wherein causing the order to be placed is achieved by using: information related to the item and user related personal information.
- 112. The system of claim 111, wherein the personal information includes at least one of the group consisting of the user's name, address, method of payment and payment account number.
- 113. The system of claim 111, wherein the personal information is stored in memory at the client.
- 114. The system of claim 111, wherein the system further includes a local computer and associated storage in communication with the client, and wherein the client is further configured to retrieve information from one or more of the local computer and the associated storage.
- 115. The system of claim 106, wherein the client is further configured to be controlled by means of the local computer.
- 116. The system of claim 115, further comprising a local area network, and wherein the local computer is part of the local area network.
- 117. The system of claim 106, wherein the system further comprises a central processing facility in communication with the server and wherein the client is further configured to send information used in processing the order to the central processing facility.

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- 118. The system of claim 117, wherein the client is configured to communicate with the server via the central processing facility.
- 119. The system of claim 118, wherein the central processing facility comprises a telephone system.
- 120. The system of claim 106, wherein the server is configured to send an order confirmation to the user to confirm the order.
- 121. The system of claim 106, wherein the server is configured to provide data in a series of multiplexed packets, ones of which contain video data, and others of which contain the computing application.
- 122. The system of claim 106, wherein the computing application is repetitively transmitted during times that the video is transmitted.
- 123. The system of claim 106, wherein the client further comprises a client computer and an auxiliary processor, and:
  - the auxiliary data processor is configured to process data representing the video, and the client computer is configured to execute the executable code.
- 124. The system of claim 123, wherein the client computer and the auxiliary data processor are within a set top box.
- 125. An interactive television system, the system comprising:
- a receiver configured to receive both television programming and a computing application comprising executable code; and
- a processing unit configured to:

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- execute the computing application to cause display of interactive information associated with the television program, while the television program is being displayed at a display device associated with the processing unit;
- use the interactive information associated with the television program to show or describe an item to the television user;
  - enable the television user to select the item by way of an interaction; and
- in response to the interaction, derive order
- 126. The system of claim 125, wherein the interaction causes the processing unit to display instructions to solicit information necessary to cause an order for the item to be placed.
- 127. The system of claim 126, wherein the information is solicited using one or more of an onscreen display and voice instructions.
- 128. The system of claim 125, wherein the interaction is by way of a single command.
- 129. The system of claim 128, wherein the single command is pressing of a single button on a TV remote control.
- 130. The system of claim 125, wherein the processing unit is configured to cause the order to be placed using:
- information related to the item and user related personal information.
- 131. The system of claim 130, wherein the personal information includes at least one of the group consisting of the user's name, address, method of payment and payment account number.
- 132. The system of claim 130, further comprising a local memory to store the personal information memory.

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- 133. The system of claim 125, further comprising a central processing facility to communicate information.
- 134. The system of claim 133, the central processing system comprises a telephone system.
- 135. The system of claim 125, further comprising a further receiver configured to receive an order confirmation to confirm the order.
- 136. The system of claim 125, wherein the data comprises a series of multiplexed packets, ones of which contain video data, and others of which contain the computing application, the system including a first extractor configured to extract the video and a second extractor configured to extract the computing application from the series of data packets.
- 137. The system of claim 125, including:
- an auxiliary data processor configured to process the video, and
- a client computer configured to execute the computing application, the unit being associated with the client computer.
- 138. The system of claim 137, wherein the client computer and the auxiliary data processor comprise a set top box.
- 139. An interactive television system to order an item, the system comprising:
- a server configured to transmit to the client both television programming and a computing application comprising executable code, the executable code to be executed at the client to cause display of interactive information associated with the television program while the television program is being displayed at the client, the interactive information to show or describe an item to a television user and to enable the television user to select the item by interacting with the client; and
- a receiver configured to receive an order for the item in response to the television user interacting with the client.

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- 140. The system of claim 139, wherein the received order includes: information related to the item and user related personal information.
- 141. The system of claim 140, wherein the personal information includes at least one of the group consisting of the television user's name, address, method of payment and payment account number.
- 142. The system of claim 139, wherein the server is configured to provide the data in a series of multiplexed packets, ones of which contain data representing the video, and others of which represent the computing application.
- 143. The system of claim 139, wherein the server is configured to repetitively transmit at least a portion of the computing application during times that the video is transmitted.

Claims 144.-245. (Cancelled)

AMENDMENT AND RESPONSE UNDER 37 C.F.R § 1.111
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AND SYSTEM TO ORDER AN ITEM USING A DISTRIBUTED COMPUTING SYSTEM
246. A machine-readable medium embodying a sequence of instructions that, when executed
by a machine, cause the machine to perform operations comprising:
receiving both a television program and a computing application comprising executable
code;
causing the television program to be displayed;
executing the executable code to cause display of interactive information, while the
elevision program is being displayed;
using the interactive information to show or describe an item to a television user;
enabling the television user to select the item by way of an interaction; and
in response to the interaction, derive order information from the viewer interaction and
send the order information to the server.
247. A machine-readable medium embodying a sequence of instructions that, when executed
by a machine, cause the machine to:
provide to a client a television program and a computing application comprising
executable code, the executable code to cause display, at the client, of interactive information
associated with the television program, while the television program is being displayed at the
client, the interactive information associated with the television program to show or describe an
tem to the television viewer;
detect, at the server, a viewer interaction associated with the interactive information, the
viewer interaction indicating a selection of the item; and
in response to the viewer interaction, receiving an order for the item.
248. A method comprising:
using the server to provide, to the client, a television program and data for use by a
computing application comprising executable code, the executable code to cause display, at the
client, of interactive information associated with the television program, while the television
program is being displayed at the client;
at the client, executing the computing application to cause display of the interactive
nformation;

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AND SYSTEM TO ORDER AN ITEM USING A DISTRIBUTED COMPUTING SYSTEM using the interactive information to show or describe an item to a television viewer; enabling the television viewer to select the item by interacting with the client; and in response to the viewer interaction, causing an order relating to the item to be placed. 249. The method of claim 248, wherein the viewer interaction is by way of a single command. 250. The method of claim 249, wherein the single command is pressing of a single button on a TV remote control. 251. The method of claim 248, wherein causing the order to be placed is achieved by using: information related to the item and viewer related personal information. 252. The method of claim 251, wherein the personal information is stored in memory at the client. 253. A method comprising: receiving data to be used by a computing application comprising executable code, the executable code to cause display, at a client, of interactive information associated with a television program, while the television program is being displayed at the client; executing the computing application comprising the executable code to cause display of interactive information; using the interactive information to show or describe an item to a television user; enabling the user to select the item by way of an interaction; and in response to the interaction, causing an order relating to the item to be placed. A method of facilitating ordering an item using an interactive television system, the method comprising: providing data to be used by a computing application comprising executable code to a client to cause display of interactive information associated with a television program, while the television program is being displayed at the client, the client to use the interactive information to

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show or describe an item to a television user and to enable the user to select the item by
interacting with the client; and
in response to the interaction, receiving an order for the item.
255. An interactive television system comprising:
a server configured to provide data to clients, to be used by a computing application
comprising executable code, to a client, the executable code to cause display, at the client, of
interactive information associated with a television program, while the television program is
being displayed at the client; and
a client configured to:
execute the computing application comprising executable code to cause display of
interactive information,
use the interactive information to show or describe an item to a television user,
enable the television user to select the item by interacting with the client, and
in response to the interaction, derive order information from the viewer
interaction and send the order information to the server.
256. An interactive television system to order an item, the system comprising:
a receiver configured to receive data to be used by a computing application comprising
executable code, the executable code to cause display, at a client, of interactive information
associated with a television program, while the television program is being displayed at the
client; and
a processing unit configured to:
execute the computing application comprising executable code to cause display of
interactive information,
use the interactive information to perform at least one of showing an item to a
television user and describing an item to a television user,
enable the user to select the item by way of an interaction, and
in response to the interaction, derive order information from the viewer
interaction and send the order information to the server

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257. An interactive television system to order an item, the system comprising:
a server configured to provide data, to be used by a computing application comprising
executable code, the executable code to display interactive information associated with a
elevision program, to a client, while the television program is being displayed at the client, the
client to use the interactive information to show or describe an item to a television user and to
enable the television user to select the item by interacting with the client; and
a receiver configured to receive an order for the item, in response to the interaction,.
258. A method of facilitating ordering using an interactive television system including at least
one client and at least one server, the method comprising:
providing, from the at least one server to the at least one client, data for use by a
computing application, the computing application comprising executable code, the executable
code to display interactive information associated with a television program, while the television
program is being displayed at the client;
at the client, executing the computing application comprising executable code to cause
lisplay of interactive information;
using the interactive information to show or describe an offering to a television viewer
enabling the viewer to select the offering by interacting with the client; and
in response to the viewer interaction, causing an order relating to the offering to be
placed.
259. A method of facilitating ordering an offering using an interactive television system, the
nethod comprising:
receiving data to be used by a computing application comprising executable code, the
executable code to display interactive information associated with a television program, while
he television program is being displayed;
executing the computing application comprising executable code to cause display of
nteractive information;

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using the interactive information to perform at least one of showing an item to a
television user and describing an item to a television user;
enabling the user to select the offering by way of an interaction; and
in response to the interaction, causing an order relating to the offering to be placed.
260. A method comprising:
providing data to be used by a computing application comprising executable code to a
client to cause display of interactive information associated with a television program, while the
television program is being displayed, the client to use the interactive information to show or
describe an offering to a television user and to enable the user to select the offering by
interacting with the client and
in response to the interaction, receiving an order for the offering.
261. An interactive television system comprising:
a server configured to provide data to clients, the data to be used by a computing
application comprising executable code, the executable code to display interactive information
associated with a television program, while the television program is being displayed; and
a client configured to:
execute the computing application comprising executable code to cause display of
interactive information,
use the interactive information to perform at least one of showing an offering to a
television user and describing an offering to a television user,
enable the television user to select the offering by interacting with the client, and
in response to the interaction, cause an order for the offering to be placed.
262. An interactive television system comprising:
a receiver configured to receive data to be used by a computing application comprising
executable code, the executable code to display interactive information associated with a
television program, while the television program is being displayed; and
a processing unit configured to:

interacting with the client.

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execute the computing application comprising executable code to cause display of interactive information, using the interactive information to perform at least one of showing and describing an offering to a television user, enable the television user to select the offering by way of an interaction, and in response to the interaction, derive order information from the viewer interaction and send the order information to the server. 263. An interactive television system comprising: a server configured to provide data to clients, the data to be used by a computing application comprising executable code to display interactive information associated with a television program, while the television program is being displayed a client configured to: receive the data from the server, use the interactive information to perform at least one of showing and describing an offering to a television user, and permit the television user to select the item by interacting with the client; and a receiver configured to receive an order for the item in response to the television user